Chapter 4 – Air Service Comparisons

Chapter Overview

Previous chapters of this study focused upon Idaho's current commercial air service system. An initial system assessment and the results of a data gathering effort were presented in Chapter 1, while Chapters 2 and 3 provided details on current demand characteristics in each study airport's market area. This chapter investigates the travel patterns of Idaho's commercial airline travelers, in terms of each airport's most popular destinations. This information is then compared to current service offered at each airport in order to determine how well current commercial airline service is satisfying the needs of the traveling public.

Statewide Findings

As discussed in the results from the travel agent survey presented in Chapter 1, the majority of Idaho's air travelers have destinations in the Northwest or Southwest. Seventy percent of the State's commercial air travelers end up at a destination somewhere west of the Rockies, according to U.S. DOT data (the passenger survey described in Chapter 1 showed this number to be about 60.5 percent). The region with the lowest demand among Idaho's travelers is the Mid-South, where fewer than two percent of travelers had destinations in 2001. The top twenty destination cities for all Idaho air service customers are presented in **Table 4-1**. Nine of the top twenty destinations for Idaho air travelers can be found in three West Coast states, with six top travel destinations in California alone. The regional distribution of destinations for all of Idaho's air travelers is depicted in **Figure 4-1**.

Table 4-1
Top 20 Destinations
Statewide

Rank	City	Rank	City
1	Seattle, WA	11	San Jose, CA
2	Portland, OR	12	Oakland, CA
3	Salt Lake City, UT	13	San Diego, CA
4	Los Angeles, CA	14	Chicago, IL
5	Spokane, WA	15	Sacramento, CA
6	Phoenix, AZ	16	Baltimore, MD
7	Las Vegas, NV	17	Minneapolis, MN
8	Reno, NV	18	Dallas, TX
9	San Francisco, CA	19	Kansas City, MO
10	Denver, CO	20	Orlando, FL

Source: US Dept. of Transportation

Much of the discussion that follows in this chapter references some of the major hub airports in the United States. **Figure 4-2** shows the location of major hub airports in the U.S.

Figure 4-1
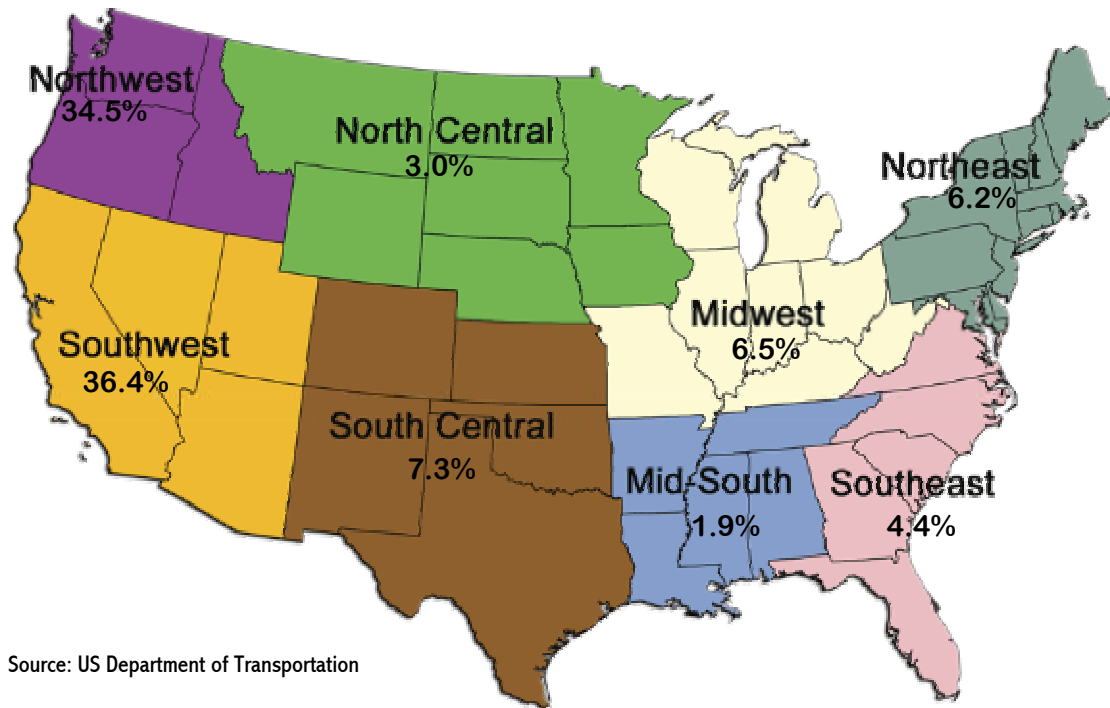## Idaho Passenger Destinations by U.S. Region (excl. AK and HI), from Ticket Sample
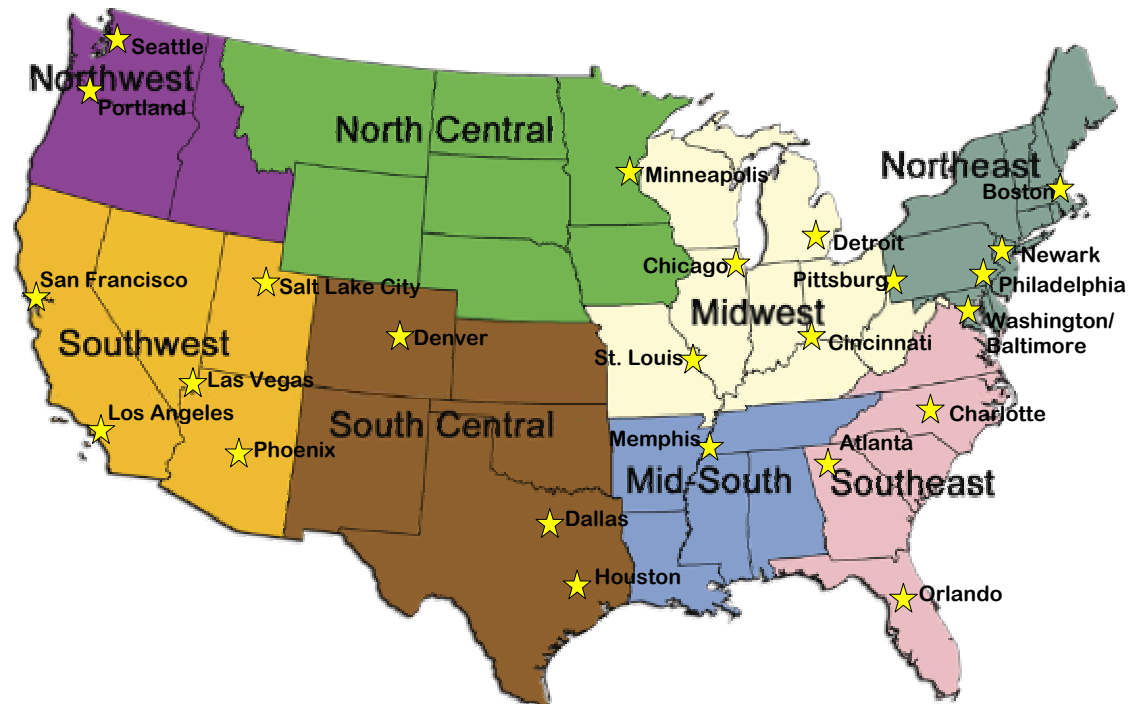

Source: US Department of Transportation

Figure 4-2
Primary U.S. Connecting Hubs

Airport Findings

Boise Air Terminal/Gowen Field

The primary destinations for Boise Air Terminal travelers are in the Southwest and Northwest regions of the country. Air travelers who begin a trip at Boise Air Terminal have destinations in the Northwest 33.2 percent of the time and destinations in the Southwest 37.6 percent (the passenger survey discussed in Chapter 1 found this number to be about 61 percent combined). Cities in the South Central and Midwest regions make up most of the remaining top destinations for Boise air service customers. **Table 4-2** shows the Top 20 travel destinations of Boise's air passengers, and **Table 4-3** shows the regional distribution of all of the destinations for Boise's air travelers. **Figure 4-3** shows Boise Air Terminal's current non-stop route system.

Table 4-2
Top 20 Destinations
Boise Air Terminal/Gowen Field

Rank	City	Rank	City
1	Seattle, WA	11	San Jose, CA
2	Portland, OR	12	Oakland, CA
3	Salt Lake City, UT	13	San Diego, CA
4	Los Angeles, CA	14	Chicago, IL
5	Spokane, WA	15	Sacramento, CA
6	Phoenix, AZ	16	Baltimore, MD
7	Las Vegas, NV	17	Minneapolis, MN
8	Reno, NV	18	Lewiston, ID
9	San Francisco, CA	19	Dallas, TX
10	Denver, CO	20	Kansas City, MO

Source: US Dept. of Transportation

Table 4-3
Origination and Destination Regions
Boise Air Terminal/Gowen Field

Region	Passengers	Percent
Mid South	22150	1.79%
Midwest	84630	6.82%
North Central	38440	3.10%
Northeast	70700	5.70%
Northwest	411840	33.21%
South Central	93890	7.57%
Southeast	51940	4.19%
Southwest	466490	37.62%
Total	1240080	

Source: US Dept. of Transportation

Boise's current air service is well-suited for the travel patterns of its consumers. Airlines at the airport provide non-stop flights to thirteen cities in the Southwest and Northwest regions, with service to most major cities in the West. Of the top 20 destinations of Boise air travelers, the airport has direct service to 17. Only Baltimore, Kansas City, and Orlando do not have non-stop service from Boise.   All three of these cities are, of course, reachable via a number of connecting hubs that are served from Boise. All of the top markets that are currently without non-stop service are east of Boise; this makes hubs at Chicago, Dallas, Denver, Minneapolis, and Salt Lake City the most logical choices for reaching these three locations. **Table 4-4** provides connecting opportunities via these hubs.

Figure 4-3
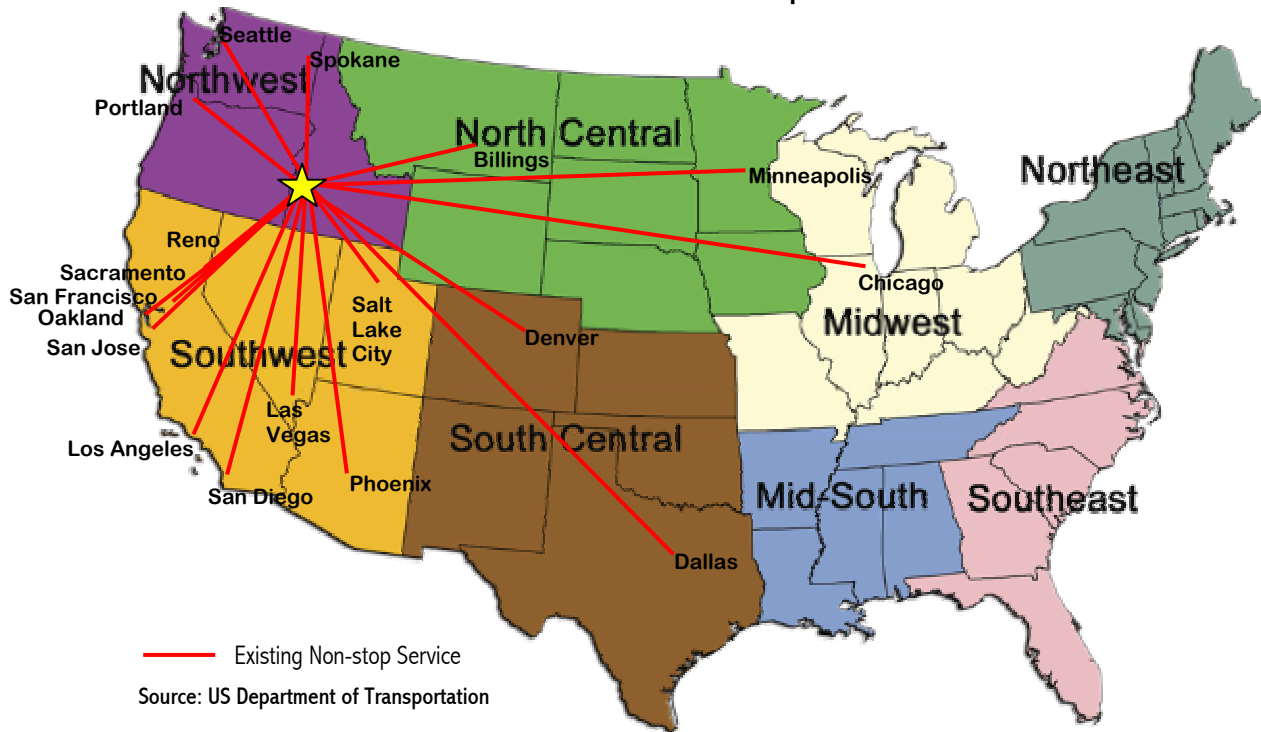## Non-Idaho Destinations Served Non-Stop from Boise Air Terminal

Existing Non-stop Service

Source: US Department of Transportation

Table 4-4

Connecting Flight Frequencies to Top Destinations

Boise Air Terminal

Connecting Hub		Number of Daily Non-Stop Departures to		
	Airline	Baltimore	Kansas City	Orlando
Chicago				
	American	4	7	5
	United	7	6	5
Dallas				
	American	7	9	7
	Delta	0	6	3
Denver				
	United	5	6	2
Minneapolis				
	Northwest	4	8	4
Salt Lake City				
	Delta	0	4	2
	Southwest	1	1	0
Total Connecting Opportunities		*28*	*47*	*28*

Source: *Official Airline Guide, November 2002*

As shown in **Table 4-4**, travelers departing Boise Air Terminal via connecting service have a number of choices for reaching their top destinations that do not have non-stop service.

Figure 4-2 presented airports that provide the majority of the nation's connecting airline service. Boise Air Terminal is fortunate in that its carriers now serve a high percentage of these airports. Almost all notable airports in the West currently have non-stop service from Boise. This indicates that further service improvements from Boise Air Terminal could be to airports/hubs in the eastern part of the country.

As shown in **Table 4-3,** almost 13 percent of all passenger trips from Boise Air Terminal are bound for destinations in the Midwest and Northeast. Connecting opportunities at Minneapolis/St. Paul International and at Chicago-O'Hare are most likely currently serving a high percentage of these trips. Hubs at Boston, Newark, Philadelphia, and Baltimore/Washington would be best positioned to serve markets and destinations in the Northeast. Hubs such as Cincinnati, Detroit, and Pittsburgh are well-suited to serve destinations in the Midwest and the Northeast. Traffic from Boise to the Southeast does not appear to be strong enough to support additional non-stop service at this time. Service to new hubs that provide increased connecting opportunities to destinations in both the Midwest and the Northeast appear to be best suited to this market's origination and destination patterns.

Another option for the Boise market would be to pursue a carrier such as AirTran. From its hub in Atlanta, AirTran now provides service to points in the West that include Denver, Las Vegas, and Los Angeles. At some point, as this carrier expands its route structure in the West, Boise may be a potential service point. It is important to note that none of this airport's Top 20 destinations are in the Southeast. This finding supports the conclusion that service to an additional hub providing connecting service to destinations in either the Midwest or Northeast would provide the most logical service enhancement. However, information from the U.S. DOT on Boise Air Terminal indicates that the average load factor (number occupied seats as a proportion of all available seats) for all flights is approximately 55 percent. This average load factor is below the national average for all U.S. airlines. The current average load factor for this airport indicates that demand may not be sufficient in the near term to support additional scheduled airline service.

Idaho Falls Regional Airport

Just as with the State as a whole, the top destination regions for Idaho Falls travelers are cities in the Northwest and Southwest. About 61 percent of Idaho Falls Regional's passengers have destinations in these areas, according to U.S. DOT data (passenger interviews indicate this number to be about 54 percent). However, the distribution of passengers throughout the country is a little different for Idaho Falls originating passengers than for the rest of the State. Travelers beginning a flight at this airport have a higher propensity to travel to destinations in the eastern part of the country. The East Coast (Northeast and Southeast regions) makes up about 18 percent of Idaho Falls' passengers' destinations, as opposed to ten percent for the State as a whole.

The addition of the Midwest region further illustrates the demand for destinations in the East from this airport; combined, these three regions together comprise about 26 percent of Idaho Falls' passengers' destinations, compared to about 17 percent statewide. In terms of individual destination cities, a similar pattern becomes evident, with eight of the top ten destination cities in the Southwest or Northwest regions. The top three destination cities for Idaho Falls' air travelers make up more than one-quarter of all trips from the airport. **Table 4-5** shows the top destination cities for Idaho Falls air passengers. **Table 4-6** shows the regional distribution of top travel destinations for these travelers, and **Figure 4-4** shows this distribution information along with the airport's current route system.

Table 4-5
Top 20 Destinations
Idaho Falls Regional

Rank	City	Rank	City
1	Salt Lake City, UT	11	Atlanta, GA
2	Seattle, WA	12	Spokane, WA
3	Portland, OR	13	San Jose, CA
4	Los Angeles, CA	14	San Diego, CA
5	Washington DC	15	Chicago, IL
6	Denver, CO	16	Orlando, FL
7	San Francisco, CA	17	Minneapolis, MN
8	Kansas City, MO	18	Dallas, TX
9	Las Vegas, NV	19	Lewiston, ID
10	Phoenix, AZ	20	Sacramento, CA

Source: US Dept. of Transportation

Table 4-6
Origination and Destination Regions
Idaho Falls Regional

Region	Passengers	Percent
Mid South	3530	3.19%
Midwest	8470	7.65%
North Central	2620	2.37%
Northeast	11580	10.46%
Northwest	33370	30.14%
South Central	8880	8.02%
Southeast	8510	7.69%
Southwest	33750	30.49%
Total	*110710*	

Source: US Dept. of Transportation

Current non-stop service available to Idaho Falls air travelers is to two destinations: Boise on Horizon Airlines and Salt Lake City on SkyWest Airlines. These two airports offer travelers good connection opportunities, particularly in Salt Lake City, to which SkyWest (operating as Delta Connection) offers nine daily flights. Horizon's service to Boise is more limited, with four weekday flights (three on weekends). From these two airports, Idaho Falls commercial airline passengers have non-stop service to each of their top ten destinations. **Table 4-7** shows the connection opportunities that these two airports provide to the top ten destinations for Idaho Falls' commercial air travelers.

Figure 4-4
Passenger Destinations by U.S. Region and Current Route Map
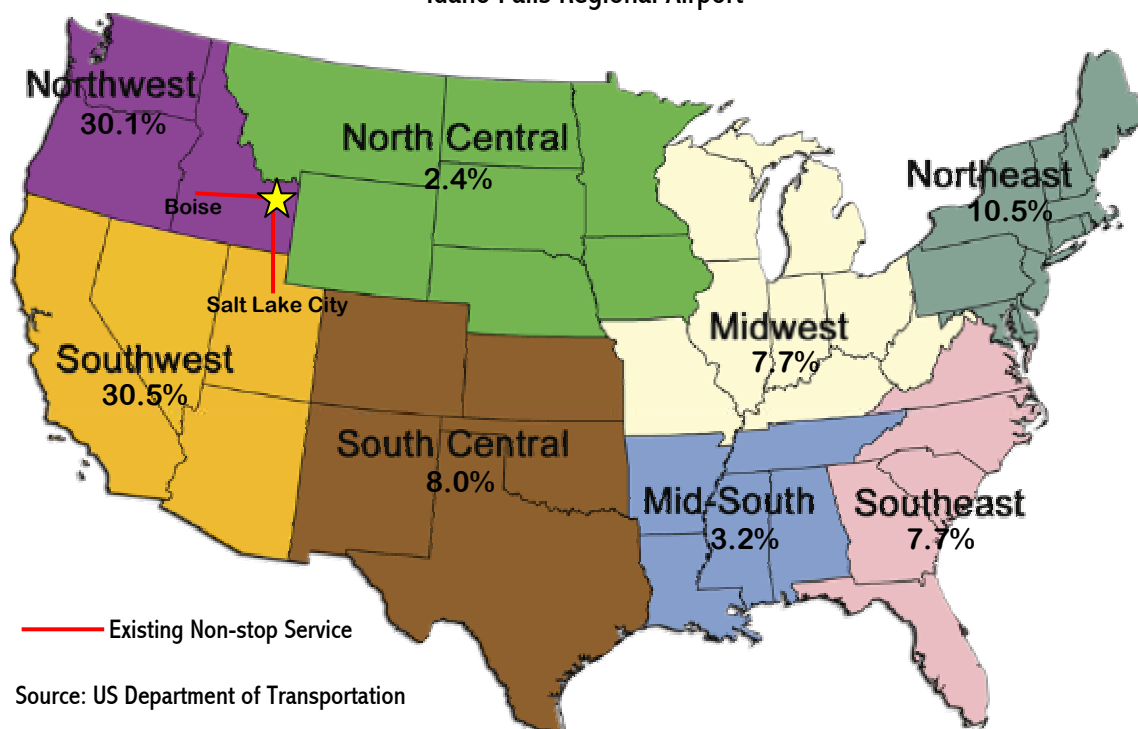#### Idaho Falls Regional Airport

Source: US Department of Transportation

Table 4-7
Connecting Flight Frequencies To Top Destinations
Idaho Falls Regional

Connecting Hub				Number of Daily Non-Stop Departures to					
Airline	Denver	Kansas City	Las Vegas	Los Angeles	Phoenix	Portland	San Francisco	Seattle	Washington, DC
Boise									
Alaska/Horizon	1	0	0	2	0	6	0	8	0
America West	0	0	0	0	2	0	0	0	0
Delta	0	0	0	2	0	0	0	0	0
Frontier	2	0	0	0	0	0	0	0	0
Southwest	0	0	4	5	1	3	0	2	0
United/United Express	4	0	0	0	0	0	4	0	0
Salt Lake City									
America West	0	0	0	0	7	0	0	0	0
Delta/Delta Connection	4	4	6	12	8	6	5	6	2
Frontier	3	0	0	0	0	0	0	0	0
Jet Blue	0	0	0	1	0	0	0	0	0
Southwest	0	1	9	6	7	4	0	3	1
United/United Express	6	0	0	4	0	0	3	0	0
Total Connecting Opportunities	*19*	*5*	*19*	*30*	*25*	*13*	*12*	*11*	*3*

Source: *Official Airline Guide, November 2002.* **Bold Face** indicates on-line connection opportunities.

From existing service at Boise and Salt Lake City, Idaho Falls passengers have connections to each of their top destinations. Many of the top destination cities for Idaho Falls Regional correspond with the hub airports depicted in Figure 4-2. Both Portland and Seattle are Top 10 destination markets for Idaho Falls, but with no more than 35 enplaned passengers per day to either of these markets (combined with the probability of carrying a few connecting passengers) the feasibility of attracting non-stop service to either of these two markets in the near term is limited.

If this airport were to attract additional airline service, it would most likely be to a top destination point that could also attract connecting passengers. When discussing potential options for commercial airline service improvements, it is logical to examine the route structures of carriers who now serve the general geographic region. Hubs at either Minneapolis or Denver provide good opportunities for travel to top destinations and points beyond. United Airlines, Denver's major carrier, currently provides service to cities in the Dakotas, Montana, Nebraska, and Wyoming, but offerings to many of these destinations are limited. Northwest Airlines connects some cities in Montana to its hub in Minneapolis. Service to Dallas, the 19th ranked destination, would have the potential to serve other destinations in the South Central, Mid-South, and Southeast regions. Combined, cities in these three regions account for almost 19 percent of Idaho Falls' total originating passengers. While demand for travel to cities in the region appears strong, examples of carriers providing non-stop service from small cities in the Northwest region to Dallas are limited.

Load factor information for this airport indicates that all flights have a combined load factor of 54 percent. On regional carriers, a load factor of 50 percent is considered the minimum needed for financially self-supporting service, unless yields are high. Additional service by an additional carrier could dilute current load factors to the point that current service may no longer be financially feasible.

Lewiston/Nez Perce County Airport

The travel patterns of Lewiston/Nez Perce County's originating passengers are somewhat different from travelers in the rest of the State. About 70 percent of Lewiston's travelers have destinations in the Northwest, according to U.S. DOT data (passenger surveys at the airport show this proportion to be about 63 percent). Another 20 percent travel to destinations in the Southwest. No other region accounts for more than 2.5 percent of Lewiston's air travelers. The distribution of destinations of Lewiston/Nez Perce County's originating passengers is shown in **Table 4-8. Figure 4-5** shows this distribution and the current route system from the airport.

The top five destinations for travelers from this market are Seattle, Portland, Los Angeles, Idaho Falls, and Pocatello. (Boise is likely the second most popular destination according to airport management, but since much of the traffic to Boise is connecting traffic, it is not possible to determine accurately what position that destination would occupy.) The airport seems to be used primarily by business travelers, as the top five destinations are cities either the major cities in the Northwest or within Idaho. These travel patterns are not indicative of this market's leisure

travelers, who are more likely driving to Spokane first to take advantage of lower average fares and more carrier choices and destinations. The top 20 destinations for Lewiston/Nez Perce County are shown in **Table 4-9.**

Table 4-8
Top 20 Destinations
Lewiston/Nez Perce County Regional

Rank	City	Rank	City
1	Seattle, WA	11	San Diego, CA
2	Portland, OR	12	Oakland, CA
3	Los Angeles, CA	13	San Francisco, CA
4	Idaho Falls, ID	14	Minneapolis, MN
5	Pocatello, ID	15	Reno, NV
6	Las Vegas, NV	16	Elko, NV
7	Anchorage, AK	17	Fairbanks, AK
8	Phoenix, AZ	18	Juneau, AK
9	San Jose, CA	19	Salt Lake City, UT
10	Sacramento, CA	20	Denver, CO

Source: US Dept. of Transportation

Table 4-9
Origination and Destination Regions
Lewiston/Nez Perce County

Region	Passengers	Percent
Mid South	740	1.29%
Midwest	1270	2.21%
North Central	710	1.24%
Northeast	1500	2.61%
Northwest	39710	69.16%
South Central	900	1.57%
Southeast	1130	1.97%
Southwest	11460	19.96%
Total	*57420*	

Source: US Dept. of Transportation

Current service at Lewiston/Nez Perce County includes about eight flights per day, four to Boise and four to Seattle (three flights to each on weekends) on Horizon Airline's Dash-8s. Since these two cities are reported as the airport's top two destinations, about half of Lewiston/Nez Perce County's passengers can find non-stop service to their final destinations in these cities. Further, Seattle offers connecting opportunities to destinations in the western United States. Once they reach either Boise or Seattle, the combination of Boise's and Seattle's connecting opportunities affords Lewiston travelers non- or one-stop service to 19 of the airport's top 20 destinations.

Most of Lewiston's originating passengers, about 90 percent, travel to destinations west of the Rocky Mountains. Lewiston's current commercial service offers non- or one-stop service to most top destinations of the airport's users, once they have flown to either Boise or Seattle. As noted in Chapters 2 and 3, Lewiston's airport competes with Pullman-Moscow Regional and Spokane International for the area's demand for commercial service. In order to attract some of the demand that the airport currently loses to other airports, it would be necessary for Lewiston/Nez Perce County Airport to differentiate its service offerings. The hub at Seattle/Tacoma International and the regional connections available from Boise allow Lewiston travelers one-stop service to most of the major destination cities in the West.   **Table 4-10** shows the connection opportunities available from Seattle and Boise. The table shows that Lewiston airline passengers have several daily connections to all of the airport's top ten destinations. Sacramento, the airport's tenth-most popular destination, has the fewest connecting flights from Seattle on Alaska/Horizon Airlines, with just four daily departures (passengers connecting to Southwest Airlines have another five departure choices to Sacramento). Portland, which is Lewiston's second-most popular destination, has 29 connecting flights each day on Horizon.

Figure 4-5
Passenger Destinations by U.S. Region and Current Route Map
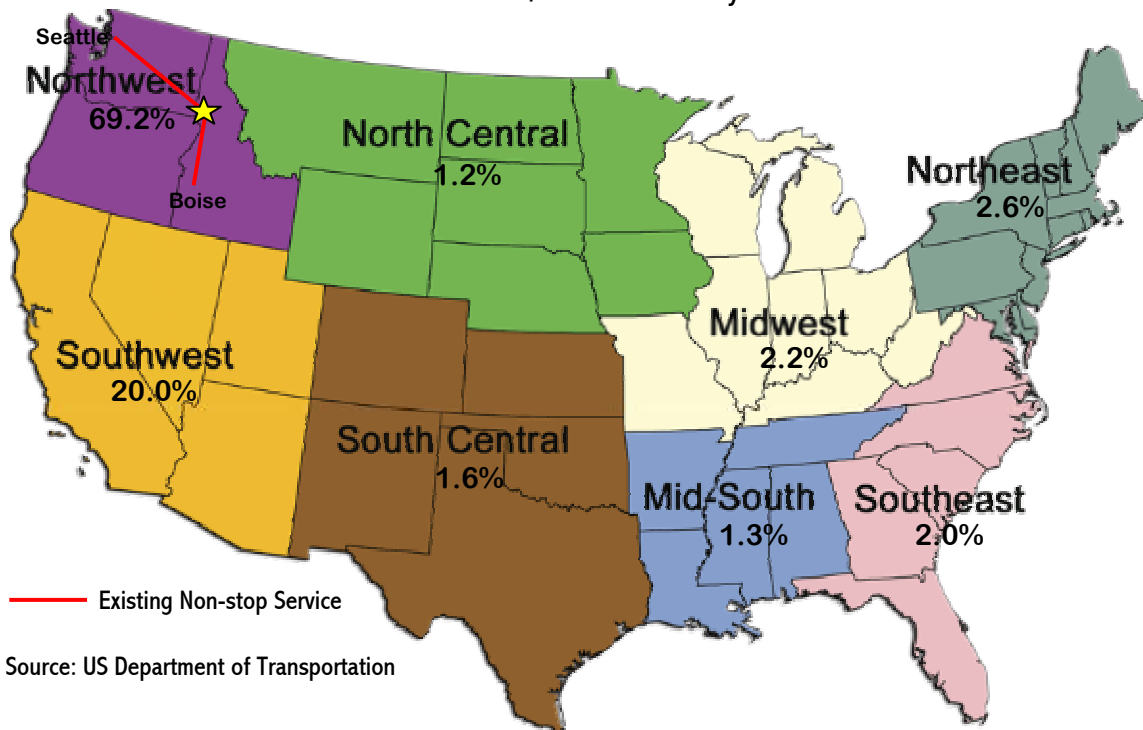Lewiston/Nez Perce County

Source: US Department of Transportation

Table 4-10

Connecting Flight Frequencies To Top Destinations

Lewiston/Nez Perce County Regional

Connecting Hub				Number of Daily Non-Stop Departures to						
	Airline	Anchorage	Las Vegas	Los Angeles	Oakland	Phoenix	Portland	Sacramento	San Diego	San Jose
Boise										
	Alaska/Horizon	**0**	**0**	**2**	**0**	**0**	**6**	**2**	**2**	**2**
	America West	0	0	0	0	2	0	0	0	0
	Delta	0	0	2	0	0	0	0	0	0
	Southwest	0	4	5	1	1	3	0	0	0
	United/United Express	0	0	0	0	0	0	0	0	0
Seattle										
	Alaska/Horizon	**13**	**8**	**26**	**7**	**7**	**29**	**4**	**7**	**8**
	America West	0	4	0	0	6	0	0	0	0
	Continental	1	0	0	0	0	0	0	0	0
	National	0	3	0	0	0	0	0	0	0
	Northwest/Northwest Airlink	0	0	14	0	0	0	0	0	0
	Southwest	0	2	0	5	8	0	5	3	4
	United/United Express	<u>1</u>	<u>0</u>	<u>6</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>1</u>	<u>0</u>
Total Connecting Opportunities		*15*	*21*	*55*	*13*	*24*	*42*	*11*	*13*	*14*

Source: *Official Airline Guide, November 2002.* **Bold Face** indicates on-line connection opportunities.

Even though about 90 percent of Lewiston's passengers fly to destinations in the West, there is still a significant number of passengers who travel to destinations in the East. Currently, this traffic connects through Seattle or Boise.

Lewiston could purse service to another hub airport with better east-bound connecting traffic. Salt Lake City, the airport's number 19 destination, would provide such connecting opportunities, as would Denver, the number 20 destination. Minimal service implemented to one of these hubs would enable passengers to travel to destinations in the East more efficiently, and allow Lewiston/Nez Perce County Airport to differentiate its service offerings. Efforts to attract such service could be hampered by the fact that the airport's flights currently operate at about a 44 percent load factor, somewhat lower than the State average of 52 percent. Some consolidation of existing flight frequency could be needed in order for new service to be successful. Current load factors are not indicative of an airport that can readily support additional service. Load factors in excess of 50 percent are generally needed for service on regional carriers to be profitable, unless yields are high.

Pocatello Regional Airport

The most popular destination regions for travelers beginning flights at Pocatello Regional are the same as for the State, with about 73 percent of passengers destined for locations in the Northwest or Southwest, according to U.S. DOT data. The passenger survey discussed in Chapter 1 shows this number to be about 68 percent. However, passengers using Pocatello Regional have a higher proportion of destinations in the Northwest versus the Southwest. The five most popular destinations for Pocatello air travelers are Salt Lake City, Seattle, Portland, Spokane, and Lewiston; these five destinations constitute trips by about 17,400 originating passengers of the airport's total of 46,900 annual enplanements. **Table 4-12** shows the airport's regional destination statistics, and **Figure 4-6** shows the same information along with a current map of non-stop routes from the airport.

Current service at Pocatello Regional includes eight non-stop flights to two destinations on two carriers. Horizon Airlines provides service on three daily non-stop flights on Dash-8 aircraft to Boise, while SkyWest Airlines provides five daily departures to Salt Lake City on Embraer 120 aircraft. Salt Lake City is the most popular destination of Pocatello air travelers. Boise and especially Salt Lake City also provide good connecting opportunities, and the schedule of flights from Pocatello coincides well with those airports' connecting flights.

Table 4-11
Top 20 Destinations
Pocatello Regional

| Rank	City	Rank	City
1	Salt Lake City, UT	11	Phoenix, AZ
2	Seattle, WA	12	Minneapolis, MN
3	Portland, OR	13	Sacramento, CA
4	Spokane, WA	14	Dallas, TX
5	Lewiston, ID	15	Anchorage, AK
6	Los Angeles, CA	16	Idaho Falls, ID
7	Denver, CO	17	Las Vegas, NV
8	San Jose, CA	18	San Diego, CA
9	Kansas City, MO	19	Atlanta, GA
10	San Francisco, CA	20	Washington DC

Source: US Dept. of Transportation

Table 4-12
Origination and Destination Regions
Pocatello Regional

Region	Passengers	Percent
Mid South	610	1.42%
Midwest	2040	4.75%
North Central	1640	3.82%
Northeast	2460	5.73%
Northwest	19280	44.90%
South Central	3140	7.31%
Southeast	1730	4.03%
Southwest	12040	28.04%
Total	*42940*	

Source: US Dept. of Transportation

Figure 4-6
Passenger Destinations by U.S. Region and Current Route Map
Pocatello Regional
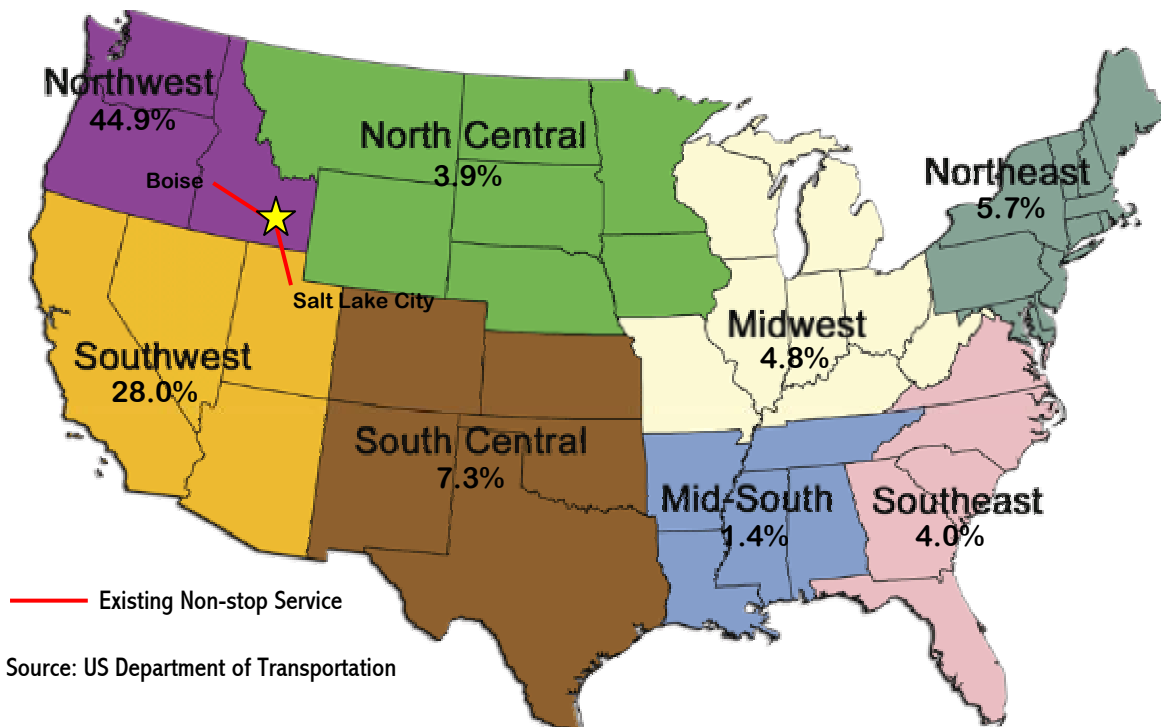
Source: US Department of Transportation

As discussed in the previous chapter, Pocatello Regional competes with Idaho Falls Regional for many of the same passengers. Currently, the airports at Pocatello and Idaho Falls offer similar

service with similar frequencies. Additionally, over the last ten years, average one-way fares at the airports have differed by no more than $22, and in many years identical fares have been offered. The airport currently has non-stop service to Boise and Salt Lake City, both of which offer good connecting service to most major cities in the West. Neither of these airports offers extensive service to eastern parts of the country, where about 16 percent of Pocatello's travelers are destined each year. Hub activity at Denver International would allow Pocatello air passengers more opportunities to connect to destinations in central and eastern parts of the nation. Denver is also number seven on Pocatello's list of top destinations. Review of statistics for this market shows that all departing flights are reporting an average load factor of 34 percent. Yields in this market are sufficient to make this load factor on existing service profitable.

Table 4-13
Connecting Flight Frequencies To Top Destinations
Pocatello Regional

Connecting Hub	Number of Daily Non-Stop Departures to							
Airline	Denver	Kansas City	Lewiston	Los Angeles	Portland	San Francisco	San Jose	Spokane
Boise								
Alaska/Horizon	1	0	4	2	6	0	2	2
Delta	0	0	0	2	0	0	0	0
Frontier	2	0	0	0	0	0	0	0
Southwest	0	0	0	5	3	0	0	3
United/United Express	4	0	0	0	0	4	0	0
Salt Lake City								
Delta/Delta Connection	4	4	0	12	6	5	5	5
Frontier	3	0	0	0	0	0	0	0
Jet Blue	0	0	0	1	0	0	0	0
Southwest	0	1	0	6	4	0	1	1
United/United Express	6	0	0	4	0	3	0	0
Total Connecting Opportunities	20	5	4	32	19	12	8	11

Source: Official Airline Guide, November 2002. **Bold Face** indicates on-line connection opportunities.

Pullman-Moscow Regional Airport

Almost two-thirds of Pullman-Moscow Regional's reported passenger destinations are in the Northwest. Combined with the Southwest region, about 88 percent of Pullman's passengers (according to both USDOT data and the passenger survey in Chapter 1) have final destinations west of the Rocky Mountains. The top five destinations from Pullman-Moscow Regional are Seattle, Portland, Los Angeles, Anchorage, and San Francisco. **Table 4-14** shows the top 20 destinations for Pullman-Moscow Regional's passengers. **Table 4-15** lists regional destination data for Pullman-Moscow Regional, and **Figure 4-7** shows a map of this regional destination data as well as the airport's current route map.

Pullman-Moscow Regional currently has one carrier, Horizon Airlines, which offers service on Dash-8 aircraft on four daily flights to Seattle, the only non-stop destination served from the airport. These four flights are timed to meet with Seattle's connection banks.

Table 4-14
Top 20 Destinations
Pullman/Moscow Regional

Rank	City	Rank	City
1	Seattle, WA	11	Eugene, OR
2	Los Angeles, CA	12	Las Vegas, NV
3	Portland, OR	13	Bellingham, WA
4	Anchorage, AK	14	Washington DC
5	San Francisco, CA	15	Tucson, AZ
6	San Jose, CA	16	Juneau, AK
7	San Diego, CA	17	Minneapolis, MN
8	Oakland, CA	18	Chicago, IL
9	Phoenix, AZ	19	Fairbanks, AK
10	Sacramento, CA	20	Detroit, MI

Source: US Dept. of Transportation

Table 4-15
Origination and Destination Regions
Pullman-Moscow Regional

Region	Passengers	Percent
Mid South	310	1.18%
Midwest	870	3.32%
North Central	350	1.33%
Northeast	1000	3.81%
Northwest	16800	64.05%
South Central	310	1.18%
Southeast	470	1.79%
Southwest	6120	23.33%
Total	*26230*	

Source: US Dept. of Transportation

Figure 4-7
Passenger Destinations by U.S. Region and Current Route Map
Pullman-Moscow Regional

Source: US Department of Transportation
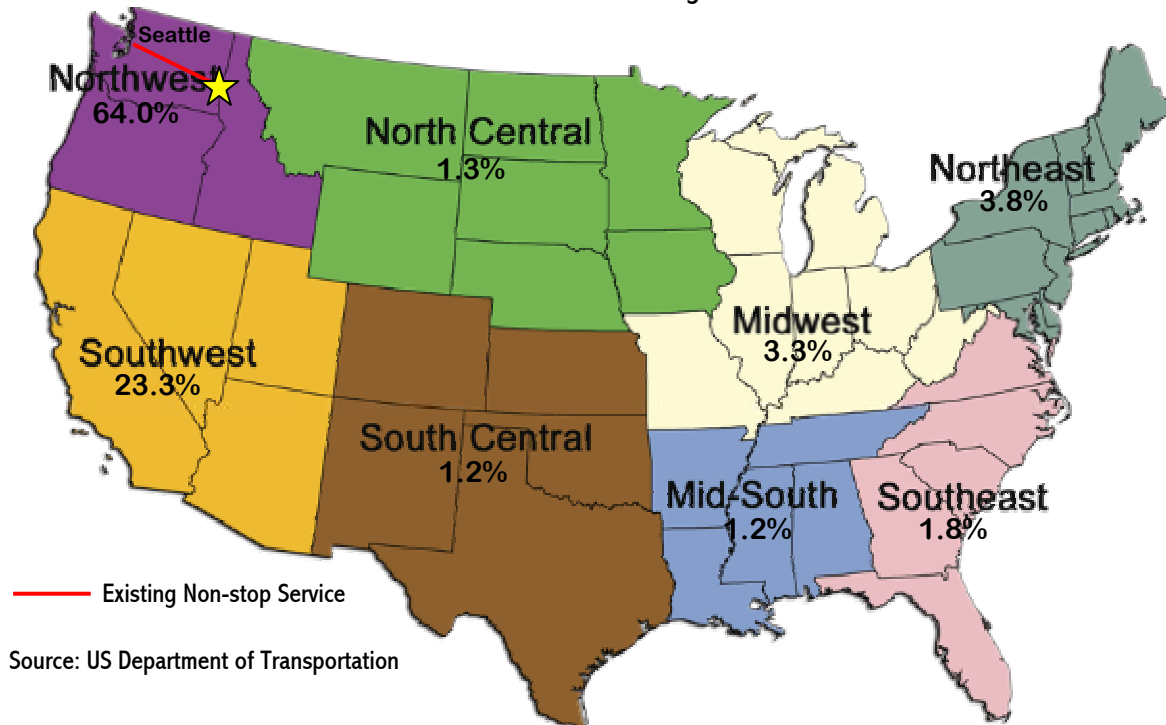
Since Pullman-Moscow's top destinations are almost exclusively in the Northwest and Southwest regions, its service to the major hub at Seattle/Tacoma International helps to meet travelers' needs. **Table 4-16** shows that passengers from Pullman-Moscow can reach their top ten destinations on one-stop service through Seattle. However, about ten percent of passenger traffic from Pullman-Moscow is destined for cities in the eastern part of the country. Given the airport's location and current carrier route structures, the most likely candidate for new service from Pullman-Moscow would be to Salt Lake City. Boise service would be another option, but service to Boise on Horizon would be more or less duplicative of service choices now available in Seattle.

Given the average load factor in this market of 34 percent, the feasibility of attracting new service in the near term is dampened. As previously noted, most regional carriers require load factors exceeding 50 percent to operate profitably. Since some flights to and from the market are "tagged" with flights serving the Lewiston market, the average load factor of 34 percent may be understated somewhat. In addition, yields may be such that carriers are operating profitably with lower load factors.

Table 4-16
Connecting Flight Frequencies To Top Destinations
Pullman-Moscow Regional

Connecting Hub		Number of Daily Non-Stop Departures to								
Airline	Anchorage	Los Angeles	Oakland	Phoenix	Portland	Sacramento	San Diego	San Francisco	San Jose
Seattle										
Alaska/Horizon	13	26	7	7	29	4	7	9	8
America West	0	0	0	6	0	0	0	0	0
Continental	1	0	0	0	0	0	0	0	0
Northwest/Northwest Airlink	0	14	0	0	0	0	0	6	0
Southwest	0	0	5	8	0	5	3	0	4
United/United Express	1	6	0	0	4	0	1	8	0
Total Connecting Opportunities	*15*	*46*	*12*	*21*	*33*	*9*	*11*	*23*	*12*

Source: *Official Airline Guide*. **Bold Face** indicates on-line connection opportunities.

Friedman Memorial Airport (Sun Valley)

Friedman Memorial Airport's passengers have reported travel patterns that are somewhat different from the rest of the State. The primary destination region for travelers from this location is in the Southwest, where over 42 percent of passengers have destinations. Another 26 percent of Sun Valley air passengers have destinations throughout the Northwest region. The West regions combined for 68 percent of destinations according to the U.S. DOT, while the passenger survey from Chapter 1 shows the two regions make up 52 percent of destinations. In addition, Friedman Memorial's passengers have a relatively high amount of destination traffic in the Northeast, where about 13 percent of the airport's travelers have final destinations. This proportion of traffic to the Northeast is about twice that of the State as a whole. The top five reported destinations of Sun Valley air travelers are Seattle, Los Angeles, Salt Lake City, New York City, and San Francisco. The top 20 destinations of passengers at Friedman Memorial are shown in **Table 4-16**. Friedman Memorial passenger's regional travel patterns are shown in **Table 4-17**. **Figure 4-8** shows these same data, along with a current route map of non-stop destinations from the airport.

Table 4-16

Top 20 Destinations

Friedman Memorial (Sun Valley)

Rank	City	Rank	City
1	Seattle, WA	11	Las Vegas, NV
2	Los Angeles, CA	12	Atlanta, GA
3	Salt Lake City, UT	13	Washington, DC
4	New York, NY	14	Dallas, TX
5	San Francisco, CA	15	Chicago, IL
6	San Diego, CA	16	Sacramento, CA
7	Portland, OR	17	Phoenix, AZ
8	San Jose, CA	18	Minneapolis, MN
9	Boston, MA	19	Albuquerque, NM
10	Denver, CO	20	Orlando, FL

Source: US Dept. of Transportation

Table 4-17

Origination and Destination Regions

Friedman Memorial (Sun Valley)

Region	Passengers	Percent
Mid South	910	1.60%
Midwest	2350	4.13%
North Central	1010	1.78%
Northeast	7310	12.85%
Northwest	14650	25.75%
South Central	3340	5.87%
Southeast	3220	5.66%
Southwest	24110	42.37%
Total	*56900*	

Source: US Dept. of Transportation

Friedman Memorial currently has service from two carriers to four destinations. The airport's dominant carrier is SkyWest, which operates nine flights per day to Salt Lake City on Embraer 120 aircraft. Horizon Airlines operates from the airport as well, using Dash-8 aircraft. Horizon provides service to three destinations, Seattle, Boise, and Los Angeles, with one daily departure to each. The Boise and Los Angeles service was instituted in December of 2002.

Friedman Memorial serves a high volume of recreational and leisure travelers. Many of the destinations reported above are most likely those of vacationers. The Los Angeles service recently introduced by Horizon at the airport is a good fit with the market's reported destination patterns. Los Angeles destinations (including other locations in and near the city) account for the second

most popular destination for travelers that use the airport. The service to Los Angeles International also provides an international gateway.

As discussed in Chapter 3, parts of Friedman Memorial's market area overlap with those of Boise Air Terminal and Joslin Field at Twin Falls. Currently, this airport has service to three major hubs at Los Angeles International, Salt Lake City International, and Seattle/Tacoma International Airports, and a regional hub at Boise Air Terminal. These hubs provide travelers at Friedman Memorial with excellent connection opportunities throughout the West (**Table 4-18** shows connection opportunities from these hubs).

As shown in **Table 4-17** and **Figure 4-8**, about one-third of the traffic at Friedman Memorial has destinations outside of the Northwest and Southwest regions. This east-bound traffic could make a hub in the North-Central or South Central regions a logical choice for future service improvements. Service to Denver or Dallas would satisfy such traffic and provide for connecting flights to other destinations in those regions. Also, since cities in the Southwest region (and California in particular) account for many of the airport's destinations, another flight to serve those destinations would also be desirable for the airport. San Francisco, San Diego, and San Jose are cities that appear in the Top 10 destinations for the airport. Flights from this airport are operating at a reported average load factor of about 44 percent. It is again likely that load factors on existing flights may need to increase before additional/supplemental service by a new or existing carrier would be considered; but it is also possible that current yields in this market are sufficient at the reported load factor.

Figure 4-8
Passenger Destinations by U.S. Region and Current Route Map
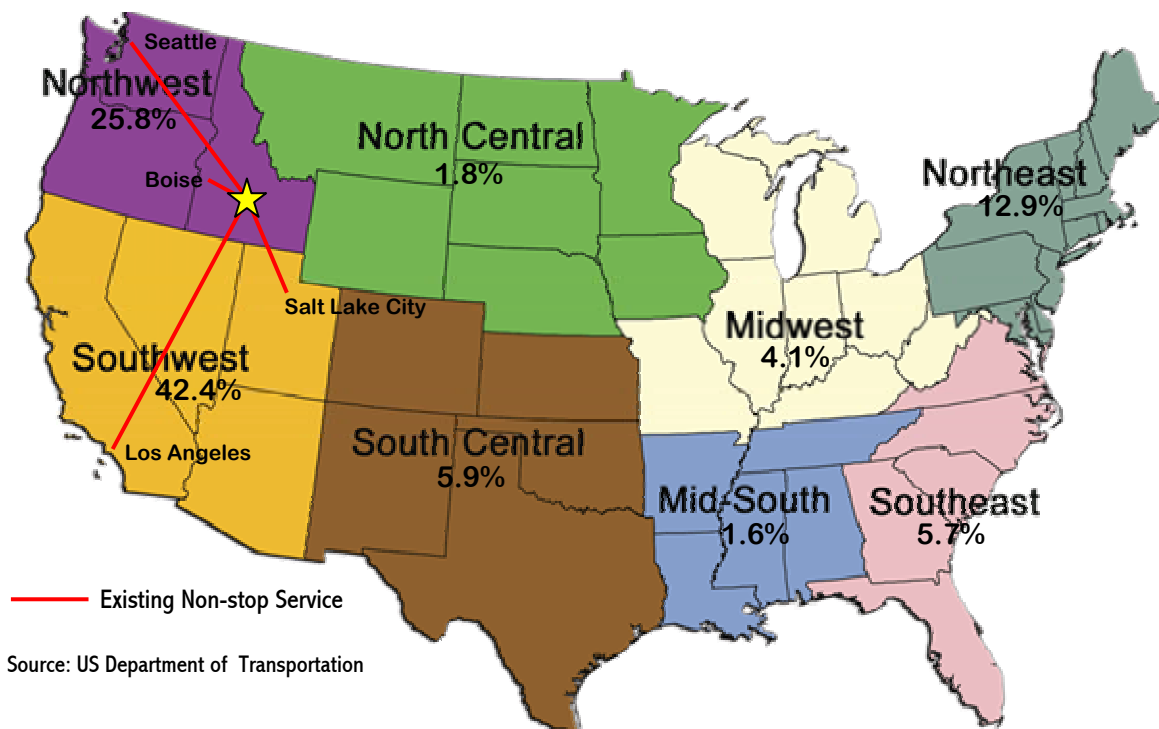### Friedman Memorial (Sun Valley)

Source: US Department of Transportation

Table 4-18
Connecting Flight Frequencies To Top Destinations
Friedman Memorial (Sun Valley)

Connecting Hub	Number of Daily Non-Stop Departures to						
Airline	Boston	Denver	New York	Portland	San Diego	San Francisco	San Jose
Boise							
Alaska/Horizon	0	1	0	6	2	0	2
Delta	0	0	0	0	0	0	0
Frontier	0	2	0	0	0	0	0
Southwest	0	0	0	3	0	0	0
United/United Express	0	4	0	0	0	4	0
Los Angeles							
Alaska/Horizon	0	3	0	5	0	15	0
American	4	3	16	0	26	14	7
Continental	0	0	9	0	0	0	0
Frontier	0	4	0	0	0	0	0
Southwest	0	0	0	0	0	17	0
Northwest/Northwest Airlink	0	0	0	4	0	0	12
United/United Express	4	11	14	5	30	31	7
Salt Lake City							
Delta/Delta Connection	3	4	5	6	4	5	5
Frontier	0	3	0	0	0	0	0
Jet Blue	0	0	2	0	0	0	0
Southwest	0	0	0	4	3	0	1
United/United Express	0	6	0	0	1	3	0
Seattle							
Alaska/Horizon	2	3	2	29	7	9	8
American	2	0	2	0	0	0	0
America West	0	0	1	0	0	0	0
Continental	0	0	5	0	0	0	0
Delta/Delta Connection	0	1	1	0	0	0	0
Frontier	0	3	0	0	0	0	0
Jet Blue	0	0	1	0	0	0	0
Northwest/Northwest Airlink	0	3	2	0	0	6	0
Southwest	0	0	0	0	3	0	4
United/United Express	0	8	1	4	1	8	0
Total Connecting Opportunities	15	59	61	66	77	112	46

Source: *Official Airline Guide.* **Bold Face** indicates on-line connection opportunities.

Joslin Field/Magic Valley Regional Airport (Twin Falls)

About 55 percent of travelers using Joslin Field reportedly travel to destinations in the Southwest region, according to USDOT data. The second most popular destination region for passengers from this market is in the South-Central region. Compared to the rest of Idaho, Twin Falls travelers have destinations in the Northwest far less often, just 8.1 percent of the time, compared to 33.2 percent for the rest of the State. The top five reported destinations for Joslin Field passengers are Salt Lake City, Los Angeles, Denver, Las Vegas, and Seattle. **Table 4-19** shows the top 20 destinations for Twin Falls passengers, as reported by the U.S. Department of Transportation. **Table 4-20** shows the regional distribution of passengers that begin flights at Joslin Field. **Figure 4-9** shows the same information graphically with a current route map for the airport. It is worth noting that given the market's proximity to Boise Air Terminal, many travelers may drive to Boise to originate a flight when their final travel destination is in the Northwest. This may account for the reported destination patterns for this region being below the State average.

Table 4-19
Top 20 Destinations
Joslin Field/Magic Valley Regional (Twin Falls)

Rank	City	Rank	City
1	Salt Lake Intl UT	11	Minneapolis, MN
2	Los Angeles, CA	12	Chicago, IL
3	Denver, CO	13	Fresno, CA
4	Las Vegas, NV	14	Atlanta, GA
5	Seattle, WA	15	Dallas, TX
6	Portland, OR	16	Kansas City, MO
7	San Diego, CA	17	Albuquerque, NM
8	San Francisco, CA	18	Spokane, WA
9	Sacramento, CA	19	Boston, MA
10	Phoenix, AZ	20	Omaha, NE

Source: US Dept. of Transportation

Table 4-20
Origination and Destination Regions
Joslin Field/Magic Valley (Twin Falls)

Region	Passengers	Percent
Mid South	610	2.37%
Midwest	1600	6.23%
North Central	1460	5.68%
Northeast	1600	6.23%
Northwest	2090	8.14%
South Central	2640	10.28%
Southeast	1590	6.19%
Southwest	14100	54.89%
Total	*25690*	

Source: US Dept. of Transportation

Joslin Field/Magic Valley Regional is served by one airline to one destination. SkyWest offers five daily flights to Salt Lake City on Embraer 120 aircraft. This service enables travelers to feed into Delta's route system and reach most destinations in the Southwest region, as well as many destinations in the eastern United States.

Connecting opportunities to Joslin Field's top 10 destinations are shown on **Table 4-21**. Passengers at Twin Falls' airport can travel on non- or one-stop service to all of their top 10 destinations. As noted in Chapters 2 and 3, Twin Falls loses originating passengers in its market area to Boise and to other competing airports. In order to reduce passenger diversion, service improvements are desirable. The South-Central region is the airport's second-most popular destination region, and Denver represents the third-most popular destination for Twin Falls travelers. Service to this airport would enable passengers to enter United Airlines' route system.

This market could also be a candidate for direct service on Horizon to Seattle, the market's fifth-most popular travel destination.

Average load factor information for this market shows that carriers are flying at a 60 percent load. This finding indicates that this market could be a candidate for one of the following actions:

- Increased flight frequency to Salt Lake City
- Larger aircraft (regional jets) to Salt Lake City
- Service by a second carrier to a second hub

The airport is currently working to secure service to Boise on Big Sky and to replace one of its turboprop flights to Salt Lake City with a regional jet which would overnight at the airport.

Figure 4-9
Passenger Destinations by U.S. Region and Current Route Map
Joslin Field/Magic Valley Regional Airport
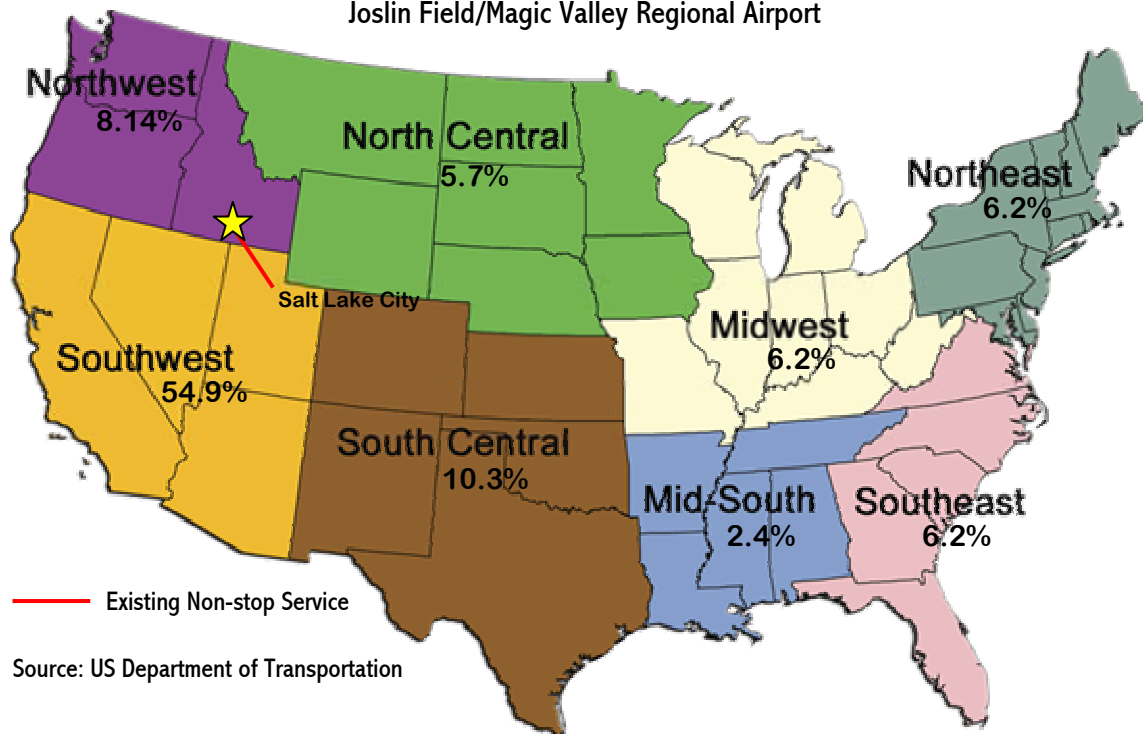
Table 4-21
Connecting Flight Frequencies To Top Destinations
Joslin Field/Magic Valley Regional (Twin Falls)

Connecting Hub		Number of Daily Non-Stop Departures to								
Airline	Denver	Las Vegas	Los Angeles	Phoenix	Portland	Sacramento	San Diego	San Francisco	Seattle
Salt Lake City									
America West	0	0	0	7	0	0	0	0	0
Delta/Delta Connection	4	6	12	8	6	4	4	5	6
Frontier	3	0	0	0	0	0	0	0	0
Jet Blue	0	0	1	0	0	0	0	0	0
Southwest	0	9	6	7	4	0	3	0	3
United/United Express	6	0	4	0	0	0	1	3	0
Total Connecting Opportunities	*13*	*15*	*23*	*22*	*10*	*4*	*8*	*8*	*9*

Source: *Official Airline Guide.* **Bold Face** indicates on-line connection opportunities.

Fleet Mix and Service Comparisons

With the exception of Boise Air Terminal, Idaho's commercial service airports are served by two airlines. Horizon Airlines provides service at the airports serving Idaho Falls, Lewiston, Pocatello, Pullman-Moscow, and Sun Valley. SkyWest Airlines provides service to Idaho Falls, Pocatello, Sun Valley, and Twin Falls airports.

Horizon serves Idaho markets with the DeHavilland Dash-8 and Dash-8/400 aircraft; these aircraft have 34- and 66-seat capacities, respectively. Systemwide, Horizon operates 41 Dash-8 aircraft, six Fokker F28s and ten Canadair CRJ700s. As of the most current available information, Horizon had on order 27 new CRJ700s. Some of these aircraft on order could be used for route expansion; other newer aircraft would be used to replace older Dash-8 and F28 aircraft in the Horizon fleet.

Similarly, SkyWest served Idaho with the Embraer 120 turboprop aircraft; this aircraft seats 31 passengers. SkyWest also uses, on a more limited basis, the CRJ aircraft to serve Idaho Falls. Systemwide, SkyWest operates 79 Embraer 120 aircraft from its hub in Salt Lake City, as well as 50 Canadair CRJ regional jets. According to the most recent available data, the airline had orders for 90 additional CRJ aircraft. These planes carry almost 40 percent more passengers than the Embraer equipment.

Almost all airports are interested in improving their scheduled commercial airline service. To this end, several of the Idaho airports have undertaken local air service studies and other efforts to both sustain and improve their airline service. Many challenges face the nation's commercial airlines; and we are almost certainly at a point in the industry where unprecedented change may be soon forthcoming. One of the objectives of this Air Passenger Demand Study was to provide the Idaho airports with information that would help them to plan for their future air service needs. Certainly, it is the recommendation of this study that all Idaho communities should work to insure

the economic viability of their current commercial airline service before they pursue new or additional service.

Service Comparisons

Many cities across the Western U.S. are comparable to cities in Idaho in terms of air service demand. A comparison of these cities and the air service options offered at their airports is of value to Idaho's commercial airports. The following discussions provide a frame of reference for Idaho's airports to analyze their current service offerings and to consider future service enhancements.

Idaho Falls. Cities similar to Idaho Falls include Grand Junction, Colorado and Great Falls, Montana. Grand Junction served about 108,000 enplanements in 2001, compared to Idaho Falls' 118,000. Great Falls served about 124,000 enplanements the same year. Commercial air service for these two cities is presented in **Table 4-22**. Of note in these cities is the mix of regional jet and turboprop aircraft and the number of carriers and flights available.

Idaho Falls Regional has five flights daily on SkyWest 50-seat CRJ regional jets, four on SkyWest 31-seat Embraer EMB120 turboprops, and four flights daily on Horizon Dash-8turboprops (either 37-seat Dash-8s or 66-seat Dash-8/400s), for a total of 13 flights. Grand Junction has 17 flights on four airlines and Great Falls has 15 flights on five airlines, both with a mix of jet and turboprop aircraft. Idaho Falls non-stop service is to just two destinations, while Grand Junction offers service to three and Great Falls to seven.   Several conclusions can be drawn from the information presented in Table 4-22. With slightly fewer enplaned passengers, the airport serving Grand Junction, Colorado has somewhat similar service, particularly in terms of airline fleet mix, to the airline service at Idaho Falls. One noted exception is that Grand Junction has service to 3 as opposed to 2 airline hubs.

With only slightly more enplanements, the airport at Great Falls, Montana, has notably different service. Airlines providing service to Great Fall connect passengers to 5 different hub airports. In addition, both Delta and Northwest continue to operate large commercial jets in this market. It is important to note that both of these flights on mainline jets are "tagged" or shared with another city. Combined passenger loads from two markets are most likely needed to insure profitability on these larger aircraft.

While Idaho Falls passengers could consider driving to Boise or Salt Lake for alternative service, driving times from Great Falls to either of these two alternatives would be significantly longer. Lack of larger airport competition explains the "better" service at Great Falls, despite the fact that this airport has only a slightly higher number of annual enplanements.

Current flight schedules and annual enplanement levels for the Idaho Falls airport indicate that flights from this airport now operate, on average, over 54 percent full. This type of average load factor typically indicates an airport may be able to support increased service either in the form of additional service to a new hub, increased flight frequency to an existing hub or larger aircraft on

an existing route. At a minimum, 3 daily round trips are typically needed to make service attractive to potential customers. For comparative purposes, additional service (similar to Grand Junction on Mesa) was reviewed. With 3 new daily round trips on a 37-seat Dash-8, the average load factor for all flights would fall below 50 percent. This finding indicates that this market may not have the potential to support 3 additional roundtrips on Dash-8 aircraft either to an existing or a new hub.

Another option might be to introduce larger aircraft on the airport's existing service to Salt Lake. This service is currently a mix of 4 31-seat turboprops and 5 regional jets. However, if the airport were served by an all regional jet fleet at 9 flights per day, the average load factor would fall to about 47 percent.

Table 4-22
Air Service Comparisons
Idaho Falls Regional

City and Enplanements		Average	
Airline	Equipment (T: Turboprop, J: Jet)	Daily Departures	Destination
Grand Junction, CO, 108,420			
Mesa	Dash-8(T)	4	Phoenix
SkyWest	Embraer EMB-120 (T)/Canadair CRJ (J)	5/1	Salt Lake City
United Express/Air Wisconsin	Dornier 328 (T)	1	Denver
United Express/SkyWest	Embraer EMB-120 (T)	6	Denver
Great Falls, MT, 124,220			
Big Sky	Swearingen Metro (T)	3	Billings/Spokane
Delta	Boeing 737-300 (J)	2	Helena/Salt Lake City
Horizon	Dash-8 400 (T)	4	Helena/Seattle
Northwest	McDonnell-Douglas DC9 (J)	4	Kalispell/Minneapolis
SkyWest	Canadair CRJ (J)	2	Salt Lake City

Source: *Official Airline Guide, November 2002*

Lewiston/Nez Perce County Regional. Lewiston's airport served about 61,000 enplanements in 2001, all on Horizon Dash-8 or Dash-8/400 turboprop aircraft, with an average of eight flights per day. An example of a similar-sized airport (in terms of enplanements) is found in Casper, Wyoming, which served about 58,000 originating passengers in 2001. However, unlike Lewiston, Casper was served by three airlines, with 13 flights per day on a mix of turboprop and jet aircraft. In addition, Horizon's service from Lewiston/Nez Perce County was to two destinations, compared to four at Casper. **Table 4-23** shows the details of Casper's service.

Currently, the average load factor at Lewiston/Nez Perce County is 44 percent on Horizon's turboprop aircraft. Typically, carriers must be approaching at least a 50 percent load factor for profitability, unless yields are high. For regional jets, this average break-even load factor is nearer to 60 percent. As noted, Horizon's fleet acquisition plans call for the purchase of 70 seat regional jets, although the airline has not indicated whether and when Lewiston will be served by the new RJ.

The airport's current enplanement level of 61,000 would support, at roughly a 60 percent load factor, 4 departures per day on a 70 seat regional jet. This number of daily departures would be down notably from the current level of 8 per day.

If larger 70 seat regional jets are ultimately introduced to this market, the current enplanement level of 61,000 would have to more than double to maintain the airport's current number of daily departures (8). Service reductions in terms of flight frequency would be needed for this airport to support commercial aircraft with higher seating capacities.

As shown in Table 4-23, current service level for Lewiston/Nez Perce Regional is somewhat lower than those found in the comparable market at Casper, Wyoming. This is true even though Casper has a slightly lower level of annual enplaned passenger. These service differences are most likely attributable to the proximity of the airports serving Pullman and Spokane. Casper does not have nearby airports that it competes with for its passengers.

Table 4-23

Air Service Comparisons

Lewiston/Nez Perce County Regional

| City and Enplanements | Equipment | Average | |
Airline	(T: Turboprop, J: Jet)	Daily Departures	Destination
Casper, WY 57,820			
Big Sky	Swearingen Metro (T)	3	Billings, MT/Gillette, WY
Great Lakes	Embraer EMB-120 (T)	6	Denver
SkyWest	Embraer EMB-120 (T)/Canadair CRJ (J)	3/1	Salt Lake City
Source: *Official Airline Guide, November 2002*			

Pocatello Regional. Pocatello Regional Airport served slightly more than 45,000 enplaned passengers in 2001, with service on two airlines (Horizon and SkyWest) to two non-stop destinations (Boise and Salt Lake City, respectively) on an average of nine flights per day. A market of similar size exists for Butte, Montana, which served 41,500 passengers in the same year. Butte's airlines were also Horizon and SkyWest, with Horizon providing non-stop service to Seattle on Dash-8/400 turboprop aircraft and SkyWest to Salt Lake City on Canadair regional jets (Horizon also provided one-stop service to Seattle through Helena). **Table 4-24** shows Butte's air service in detail.

While non-stop destinations served from each airport are the same, Pocatello has more daily departures than are provided from Butte. One primary contrast between air service at the two airports is in the equipment types. SkyWest operates four daily flights on Canadair regional jets from Butte, while from Pocatello it offers five departures daily on Embraer EMB-120 turboprops. This difference is in part attributable to the fact that Butte is a longer stage length from Salt Lake City than is Pocatello. Another difference is in the hub airport served. While Pocatello has service to Boise and Salt Lake, Butte has service to Salt Lake and Seattle. While Butte's Seattle service is

"tagged"/shared with Bozeman, Seattle clearly offers the air traveler a wider variety of both domestic and international connecting opportunities than does Boise.

As noted earlier in this report, all flights from the Pocatello market are on 30-34 seat aircraft. The average load factor for all flights departing this market is roughly 34 percent; this type of average load factor indicates that carriers serving this market are generating high yields. For informational purposes, for a carrier to operate a 50 seat RJ at a frequency of 4 round trips a day at an average load factor of 60 percent, approximately 44,000 enplanements are needed. If a carrier is operating a 70 seat RJ at 4 round trips a day and desires an average load factor of 60 percent, almost 62,000 annual enplanements would be required to support this service.

Table 4-24
Air Service Comparisons
Pocatello Regional

City and Enplanements		Equipment	Average	
	Airline	(T: Turboprop, J: Jet)	Daily Departures	Destination
Butte, MT, 41,500				
	Horizon	Dash-8 400 (T)	2	Bozeman/Seattle
	SkyWest	Canadair CRJ (J)	4	Salt Lake City
Source: *Official Airline Guide, November 2002*				

Pullman-Moscow Regional. In 2001, Pullman-Moscow Regional served about 28,130 enplanements. These passengers were served by Horizon Airlines with four daily departures to Seattle on Dash-8 or Dash-8/400 aircraft. A market of similar size exists in Klamath Falls, Oregon, which enplaned 28,340 passengers in 2001. Service from Klamath Falls was also very similar to Pullman-Moscow Regional's, with four daily flights to Portland on Dash-8 aircraft. Klamath Falls' service details are show in **Table 4-25**.

Pullman-Moscow Regional's air service is almost identical to Klamath Falls', with the only difference between the two being the final destination. Currently, Pullman-Moscow's departing flights operate at about 34 percent full on average. Information in Table 4-25 indicates that for its size, as measured by enplaned passengers, Pullman-Moscow Regional's current scheduled airline service is typical. It may be worth noting that with its current level of enplanements, this airport could only support about 2 roundtrips per day on a regional jet. A higher level of service frequency is generally preferable to larger aircraft at reduced frequency.

Table 4-25
Air Service Comparisons
Pullman-Moscow Regional

City and Enplanements		Equipment	Average	
	Airline	(T: Turboprop, J: Jet)	Daily Departures	Destination
Klamath Falls, OR, 28,340				
	Horizon	Dash-8 (T)	4	Portland

Source: *Official Airline Guide, November 2002*

Friedman Memorial (Sun Valley). Friedman Memorial served about 59,000 enplanements in 2001. Two airlines at the airport provided service to four destinations. Horizon Airlines provided service to Boise, Los Angeles, and Seattle, each once a day on 66-seat Dash-8/400 aircraft. SkyWest provided nine flights per day to its hub in Salt Lake City on 31-seat Embraer EMB-120 aircraft. This market is similar in size to Casper, Wyoming, which served slightly less than 58,000 enplanements in 2001. Service at Casper that year was provided by three airlines, with 13 flights per day on a mix of turboprop and jet aircraft. Table 4-26 shows details of Casper's air service.

Table 4-26
Air Service Comparisons
Friedman Memorial (Sun Valley)

City and Enplanements		Equipment	Average	
	Airline	(T: Turboprop, J: Jet)	Daily Departures	Destination
Casper, WY 57,820				
	Big Sky	Swearingen Metro (T)	3	Billings, MT/Gillette, WY
	Great Lakes	Embraer EMB-120 (T)	6	Denver
	Sky West	Embraer EMB-120 (T)/Canadair CRJ (J)	3/1	Salt Lake City

Source: *Official Airline Guide, November 2002*

In terms of the hub airports that are served from the Sun Valley market, current service is comparable to the service at Casper. Perhaps the biggest difference is that Casper has service to two major connecting airline hubs (Salt Lake and Denver) while Sun Valley has service to Salt Lake only. Sun Valley's existing service does link it with carriers in both Seattle and Los Angeles, although only at a frequency of one round-trip per day.

Current service to the Sun Valley market is provided on 30-34 seat and 66-seat turboprop aircraft. The average load factor for all departing flights is 41 percent. The airport's current annual enplanement level of 59,000 annually supports approximately 12 daily departures. Good commercial airline service is measured in many ways, and flight frequency is one of these measures. While overall flight frequency for a market this size appears reasonable, several markets (Boise, Seattle, and Los Angeles) have only one round trip per day. The majority (9 daily roundtrips) of this airport's service is to the Salt Lake City connecting hub.

Physical limitations may preclude this airport from supporting regional jet service, but this is a master planning issue that is beyond the scope of this analysis. That being noted, however, future air service initiatives in this market would best be focused on increasing existing service to either or both Seattle and Los Angeles.

Joslin Field/Magic Valley Regional (Twin Falls). Joslin Field provided service to about 32,800 passengers in 2001. This service was provided on SkyWest's 31-passenger Embraer EMB-120 aircraft to Salt Lake City five times per day. Similar air service demand can be found in Klamath Falls, Oregon, where 28,300 passengers were enplaned in 2001. Klamath Falls' service was on Horizon's 37-seat Dash-8 aircraft four times a day to Portland. **Table 4-27** shows the details of Klamath Falls' service.

Table 4-27
Air Service Comparisons
Joslin Field/Magic Valley Regional (Twin Falls)

City and Enplanements	Airline	Equipment (T: Turboprop, J: Jet)	Average Daily Departures	Destination
Klamath Falls, OR, 28,340				
	Horizon	Dash-8 (T)	4	Portland

Source: *Official Airline Guide, November 2002*

Currently, flights from Joslin Field operate at about a 60 percent load factor. This type of average load factor on 31 seat turboprop aircraft indicates that this airport may be able to support another roundtrip. This would increase its frequency from 5 trips per day to 6 trips per day to Salt Lake. Conversely, if this market were successful in attracting regional jet service, on a 50 seat RJ current passenger enplanements would only be able to support about 3 roundtrips per day. This would be a 50 percent flight frequency reduction from current levels. Reducing flight frequency for larger aircraft is not a service improvement for the traveling public. Given the opportunity to reach Salt Lake City on 6 different occasions each day, as opposed to 3 on a regional jet, many travelers would choose the higher flight frequency.

Airport Reference Codes. As shown in the previous tables, most of the airlines serving the "comparable" markets in nearby or bordering states are the same as those that currently serve the Idaho market, Horizon and SkyWest. Notable exceptions are Mesa Air Lines and Air Wisconsin (both of whom serve Grand Junction), Northwest and Delta Airlines (both of whom serve Great Falls), and Big Sky Airlines, a carrier that provides service on 19-seat aircraft to several markets comparable to those in Idaho.

As previously noted, both Horizon and SkyWest are operating and have orders for 50- and 70-seat regional jet aircraft. Mesa Air Lines and Air Wisconsin both operate a variety of commuter/regional aircraft, and both of these carriers are also moving toward fleets that are characterized by higher percentages of regional jets. Most of the regional jet aircraft being acquired by these airlines require longer runways and wider separation between runways and taxiways than the turboprop

aircraft they replace. In addition, the operating characteristics of the regional jets, whether they be 35, 50 or 70 seat aircraft, almost always increase an airport's requirements related to its runway protection zone (RPZ), its runway safety area (RSA), and its object free area (OFA).

The Federal Aviation Administration has developed a method of measuring the facilities required for certain classes of aircraft. A facility's airport reference code (ARC) is a combination of letters and numbers that describe the approach speed and wingspan of the airport's design aircraft (the largest aircraft the airport typically accommodates on a regular basis). The letter code, A through D, determines the approach speed of the aircraft, with higher letters representing faster aircraft (and therefore, longer runway requirements). The Roman numeral code, I through VI, represents the wingspan, with higher numbers representing wider wingspans.

Currently, the Embraer EMB-120 and the DeHavilland Dash-8 are the only aircraft serving Idaho's smaller airports on a regular basis. These aircraft are both included in the ARC B-II minimum design standard. Most regional jet aircraft, including the Canadair equipment on order by Horizon and SkyWest, require facilities that are designed to meet C-II design standards. As shown in **Table 4-28**, only four of Idaho's seven commercial airports meet this requirement, according to their current ARC. As an example, the Canadair CRJ 50-seat regional jet requires a takeoff field length of *a minimum* of 5,800 feet at sea level and an average temperature of 59 degrees. With increases in elevation and average temperatures, the takeoff field length requirement for the CRJ increases to well over 7,000 feet, according to FAA planning guidelines. The facilities at Pocatello and Twin Falls seem suitable for regional jet use, and Boise and Idaho Falls already have service on regional jets. Three of the State's commercial airports may not have sufficient runway lengths to accommodate the regional jet's minimum operating requirements (see Table 4-28).

Table 4-28
Airport Reference Codes (ARCs) and Runway Lengths

Airport	Code	Max. Runway Length
Boise Air Terminal	D-IV	10,000 ft
Idaho Falls Regional	C-III	9,001 ft
Lewiston/Nez Perce County Regional	B-III	6,512 ft
Pocatello Regional	D-IV	9,060 ft
Pullman-Moscow Regional	B-III	6,730 ft
Friedman Memorial (Sun Valley)	B-III	6,602 ft
Joslin Field/Magic Valley Regional (Twin Falls)	C-III	8,703 ft

Source: Airport Records

It was important for this analysis to take a more global look at comparable markets in neighboring states to get a snapshot of the types of aircraft that are now used to serve other regional markets. Fleet acquisition plans for most regional carriers, such as Horizon and Skywest, lean heavily toward the purchase of regional jet aircraft. In fact, the plans for many carriers call for their existing turboprop equipment (B-II aircraft) to be replaced at some point by regional jets. This particular trend has planning implications for some study airports.

As reflected in Table 4-28, several of the study airports currently are designed to B-III standards. Upgrades to category C-II standards almost always have facility implications for primary surface dimensions, runway/taxiway centerline separations, runway safety areas, object free areas, and runway protection zones, to name a few.   Physical, environmental, topographical, and other limitations may prohibit some study airports from be fully compliant with C-II design standards. This conclusion is not, however, an issue that this study will address; such a conclusion would be reached only after detailed master planning and environmental analysis.

What can be concluded, however, is that if Idaho's commercial airports wish to remain flexible and capable of competing for new or improved airline service, in some instances, their competitiveness could be adversely impacted if they are not equipped to accommodate C-II aircraft. It is equally important to point out that with current airline bankruptcies and possible consolidation within the airline industry that, at least in the short term, expanding airline service is not likely.

Chapter Conclusions

According to the analysis presented in this chapter, Idaho's commercial airports provide air service that generally meets the needs of most of their passengers. Passengers can board a plane at any of the State's seven commercial service airports and arrive at any of the State's top 10 destinations with no more than one connecting flight.

This chapter provides several tools for the Idaho Transportation Department. The data presented in the chapter and the accompanying discussions provides the following:

- Overall statewide destination information, including regional destination demand, allows the State's commercial air service system to be analyzed in terms of destination need versus destinations served

- Individual airport destination information, including regional and destination city demand, allows more refined analysis of how each market's demand for air service is being satisfied

- An analysis of connecting frequencies and one-stop service options allows airports to determine where potential service improvements may be possible

- Discussions of hub airports that serve individual airport top destination markets allows for further identification of potential service upgrades

- Comparisons of service levels at Idaho airports with comparable markets in nearby or neighboring states enables each community to "benchmark" their current level of service

- Details of airline fleets and aircraft acquisition plans allow each airport to assess whether their airport is equipped to accommodate the emerging commercial airline fleet

The information in this chapter is valuable to each airport in assessing the service it provides. This data, in conjunction with the market area data provided in Chapters 2 and 3, enables Idaho's airports to better understand their local market. With information regarding each airport's market characteristics and potential opportunities for improvement, each airport has a better understanding of its future commercial air service market.